



The Hanover Insurance Group, Inc.

First Quarter 2020 Results
April 29, 2020

*To be read in conjunction with the press release dated
April 28, 2020 and conference call scheduled for April 29, 2020*



First Quarter 2020 Operating Highlights

- Operating income⁽¹⁾ of \$2.23 per diluted share, up 13.8% from the prior-year quarter
- First quarter combined ratio of 95.2%, improved from 95.8% in the first quarter 2019; combined ratio, excluding catastrophes⁽²⁾ of 91.9%, improved from 92.2%
- Current accident year loss and loss adjustment expense (“LAE”) ratio, excluding catastrophes⁽³⁾, was impacted by favorability in personal auto from benign weather and lower miles driven, offset by elevated property loss experience and COVID-19 related reserves in Commercial Lines
- Net premiums written increase of 3.5%** primarily reflected growth in most profitable businesses
- Price increases of 5.9%, in Core Commercial Lines⁽⁴⁾ and 5.1% in Personal Lines⁽⁵⁾
- Net investment income of \$69.6 million, down 0.9% from the prior-year quarter
- Completion of the previously announced \$150 million accelerated share repurchase (“ASR”) agreement, repurchasing approximately 1.1 million shares of common stock, as well as the subsequent repurchase of approximately 350,000 shares of common stock in the open market
- Book value per share of \$72.05, down 5.1% from December 31, 2019, driven primarily by the after-tax decrease in the fair value of fixed income and equity securities, partially offset by net operating income

(1) See information about this and other non-GAAP measures and definitions used throughout this presentation on the final pages of this document.

The Hanover Insurance Group, Inc. may also be referred to as “The Hanover” or “the company” interchangeably throughout this presentation

* Operating income metrics are calculated using diluted shares outstanding; non-operating items, income from continuing and discontinued operations and net income metrics are calculated using basic shares outstanding due to antidilution

** Unless otherwise stated, net premiums written growth and other growth comparisons are to the same period of the prior year



Consolidated Financial Results Snapshot

(\$ in millions, except per share amounts)	Three months ended	
	March 31, 2019	March 31, 2020
Net income (loss)	\$122.4	(\$40.0)
<i>Per diluted/(basic) share*</i>	\$2.97	(\$1.04)
Operating income before interest and taxes	\$109.8	\$117.1
Operating income after taxes	\$80.7	\$86.8
<i>Per diluted share</i>	\$1.96	\$2.23
Book value per share	\$71.95	\$72.05
Shareholders' equity	\$2,927.0	\$2,736.6
Debt	\$653.0	\$707.5
Total capital	\$3,580.0	\$3,444.1
Debt/Total Capital	18.2 %	20.5 %
Total assets	\$11,983.4	\$12,277.4
Net income (loss) return on average equity ⁽⁶⁾	16.6 %	(5.7)%
Operating return on average equity ⁽⁶⁾	11.6 %	13.1 %
Adjusted operating return on average equity ⁽⁶⁾	13.1 %	N/A

* Operating income metrics are calculated using diluted shares outstanding; non-operating items, loss from continuing and discontinued operations and net loss metrics are calculated using basic shares outstanding due to antidilution

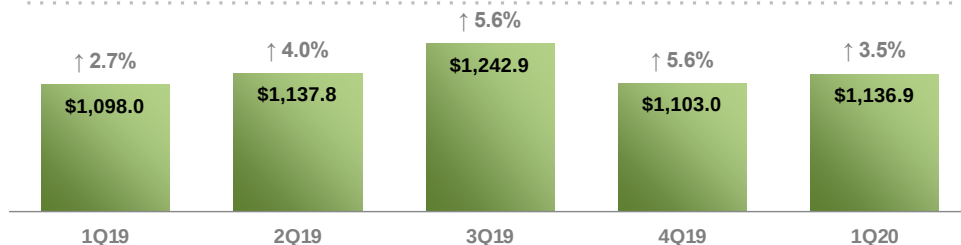
N/A = Not Applicable



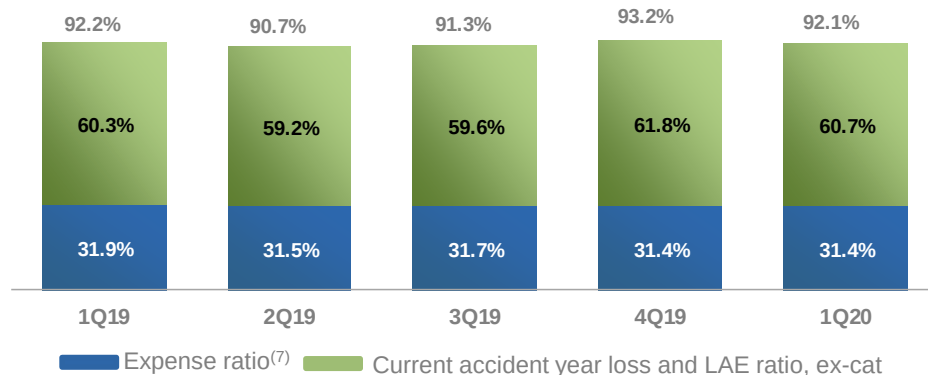
Strong Operating Results

(\$ in millions)	Three months ended March 31	
	2019	2020
Net premiums written	\$1,098.0	\$1,136.9
Growth	2.7%	3.5%
Net premiums earned	\$1,095.1	\$1,141.4
Combined ratio	95.8%	95.2%
Combined ratio, ex-cat	92.2%	91.9%
Current accident year combined ratio, ex-cat ⁽²⁾	92.2%	92.1%

(\$ in millions) **Net Premiums Written and Growth**



Current Accident Year Combined Ratio, Ex-Cat



Combined ratio of 95.2%, and 91.9%, excluding catastrophes

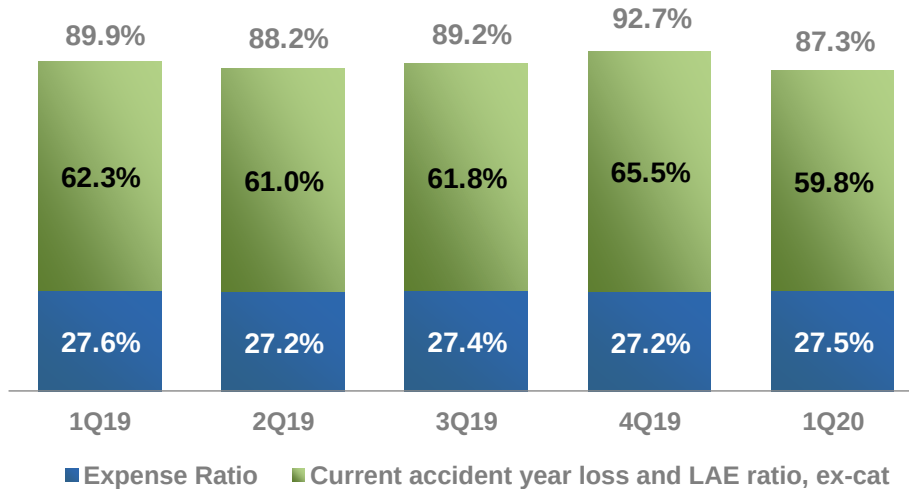
- Current accident year loss and LAE ratio, excluding catastrophes, of 60.7%, slightly elevated from prior year, impacted by:
 - Favorability in personal auto,
 - Offset by elevated property loss experience in Commercial Lines, and
 - COVID-19 related reserves
- Lower catastrophe losses
- Expense ratio improvement of 0.5 points, driven by lower discretionary spend and the timing of certain accruals
- Net favorable ex-cat prior year reserve development in both Commercial and Personal Lines

Net written premium growth of 3.5%, reflected growth in most profitable businesses



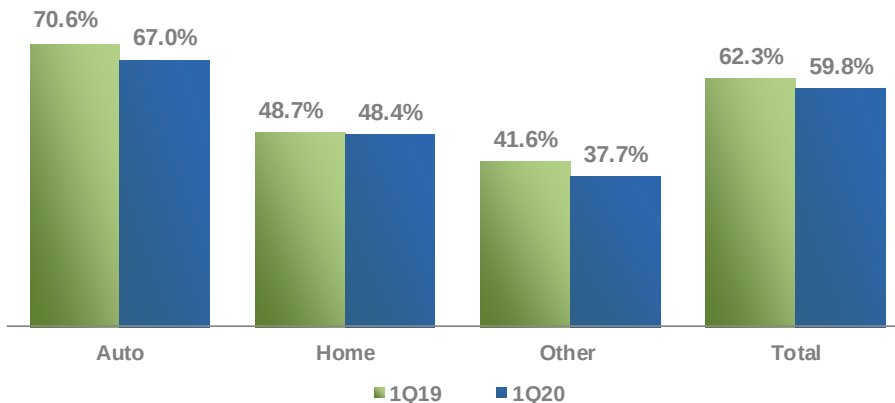
Personal Lines Underwriting Highlights

Current Accident Year Combined Ratio, Ex-Cat



- First quarter combined ratio of 90.0%, decreased 8.2 points compared to the prior-year quarter
- Catastrophe losses of 3.0%, compared to 3.6 points in the prior-year quarter
- Net favorable development of \$1.6 million, or 0.3 points, driven by reserve releases in home and other personal lines, partially offset by pressure in personal auto bodily injury
- Current accident year loss and LAE ratio, excluding catastrophes, of 59.8%, compared to 62.3% in the prior-year quarter, driven by personal auto improvement from favorable winter weather and a decline in frequency from lower miles driven in the second half of March

Current Accident Year Loss and LAE Ratio, Ex-Cat

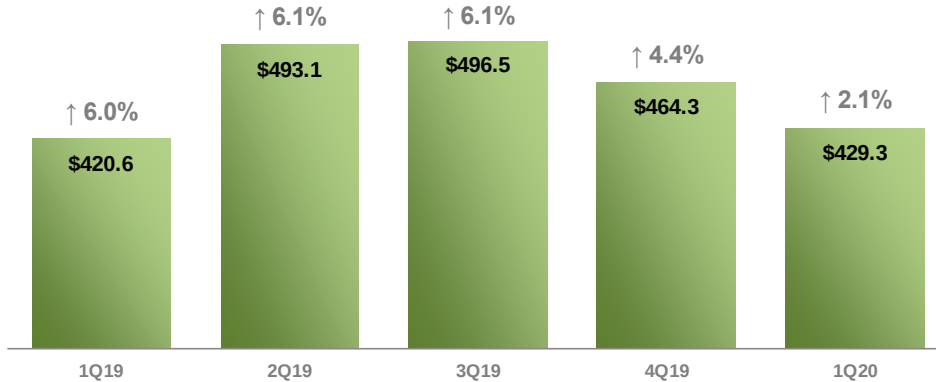




Personal Lines Growth Highlights

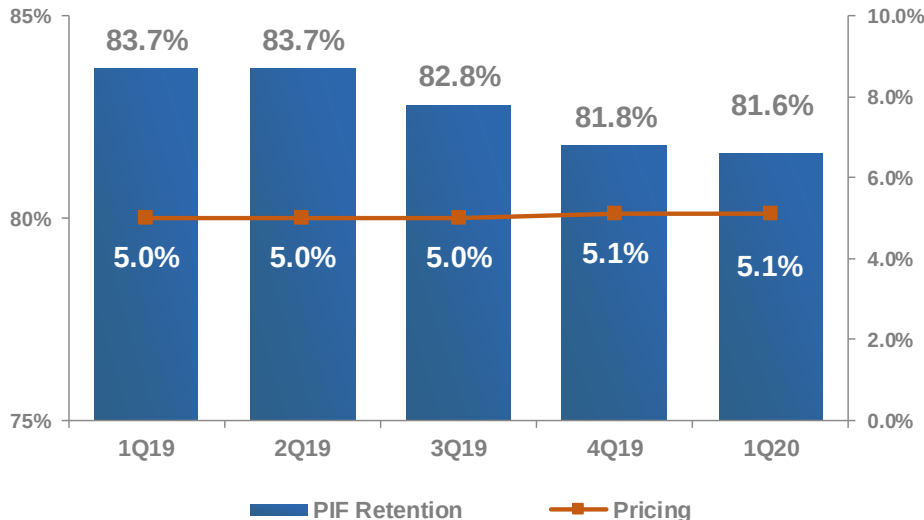
(\$ in millions)

Net Premiums Written and Growth



- Net premiums written growth of 2.1% in the quarter, driven by:
 - Solid rate increases of 5.1%
 - Retention of 81.6%, slight decrease due to continued competitive rate environment
 - Policies in force growth of 3.3%
- Strong quality of growth:
 - Account business is 85% of total book
 - Continue to build momentum in Hanover Prestige brand

Retention*



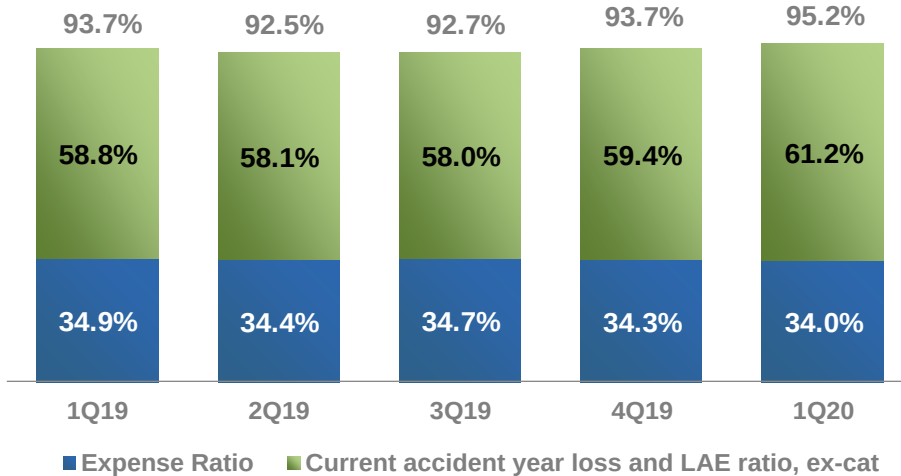
Pricing

* Retention is defined as ratio of net retained policies for noted period to those policies available to renew over the same period.

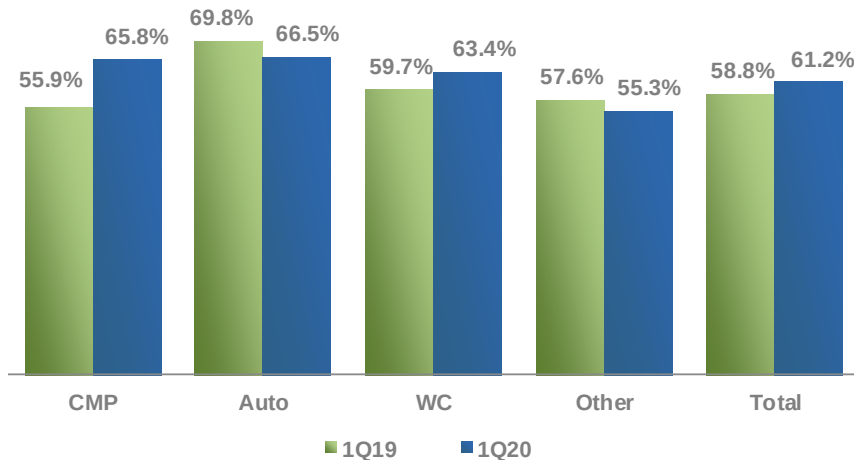


Commercial Lines Underwriting Highlights

Current Accident Year Combined Ratio, Ex-Cat



Current Accident Year Loss and LAE Ratio, Ex-Cat



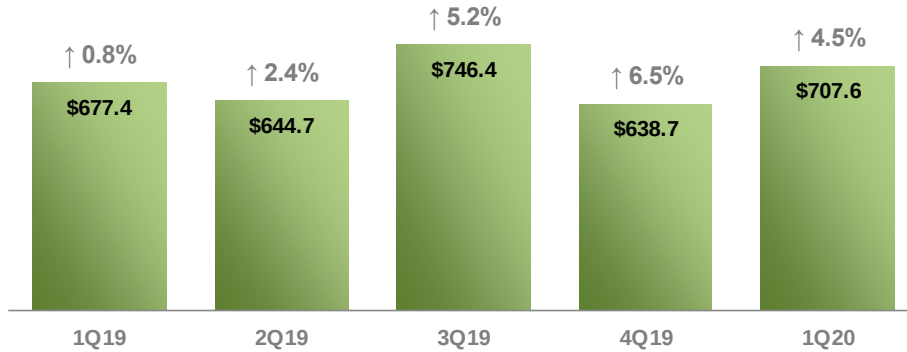
- Combined ratio of 98.2%, increased 4.0 points compared to the prior-year quarter
- Catastrophe losses of 3.5%, compared to 1.6% in the prior-year quarter, which included the benefit of the sale of certain California fire subrogation rights
- Net favorable ex-cat prior year reserve development of \$3.7 million, or 0.5 points, driven primarily by continued favorability in workers' compensation and property related activity in certain specialty lines
- Current accident year loss and LAE ratio, excluding catastrophes, of 61.2%, compared to 58.8% in the prior-year quarter, driven primarily by one unusually large fire loss in CMP (including the annual aggregate deductible part of reinsurance), and reserve provision for potential COVID-19-related exposures
- Expense ratio improvement of 0.9 points to 34.0%, primarily attributable to fixed cost leverage from growth



Commercial Lines Growth Highlights

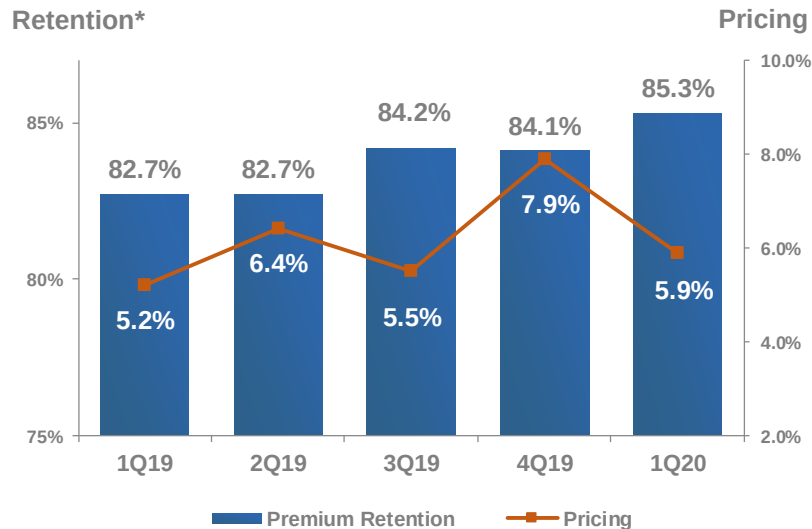
(\$ in millions)

Net Premiums Written and Growth



- Net premiums written growth of 4.5% in the quarter, driven by:
 - Growth from more profitable segments, including small commercial and certain Specialty lines, partially offset by the impact of continued profit actions in Hanover Programs
 - Core Commercial pricing of 5.9%, including rate of 4.6%; rate on consistent increasing trajectory
 - Strong retention of 85.3%

Core Commercial Lines ⁽⁴⁾



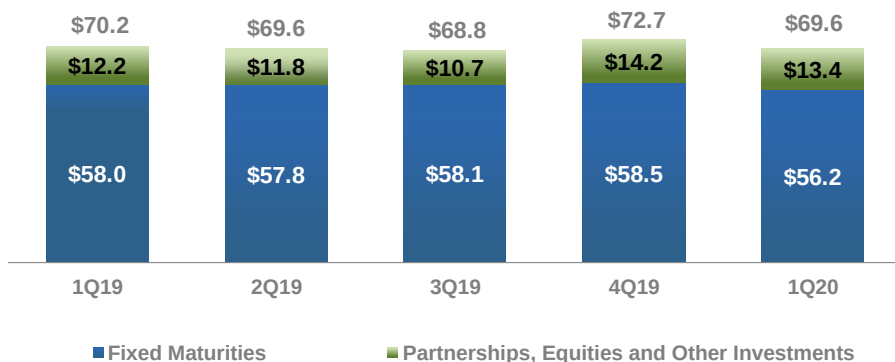
* Retention is defined as ratio of net retained policies for noted period to those policies available to renew over the same period



Net Investment Income Trends

(\$ in millions)

Net Investment Income*

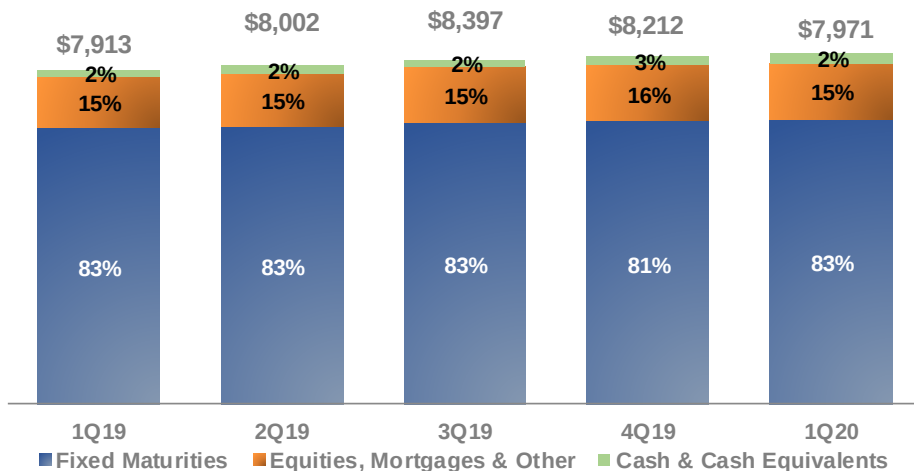


- Net investment income decreased 0.9%, in the quarter due to:

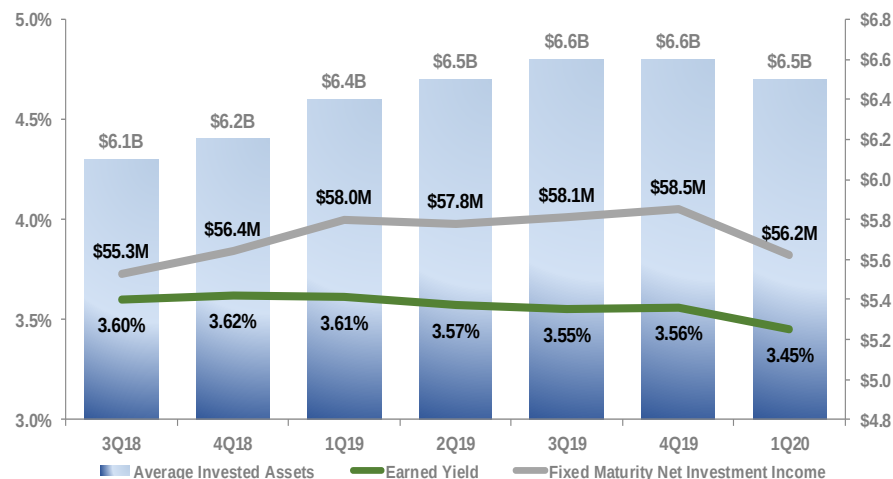
- Redeployment of excess equity throughout 2019 and lower new money yields
- Partially offset by continued investment of increased operational cashflows

(\$ in millions)

Cash and Invested Assets



Fixed Maturity Investment Portfolio Trends

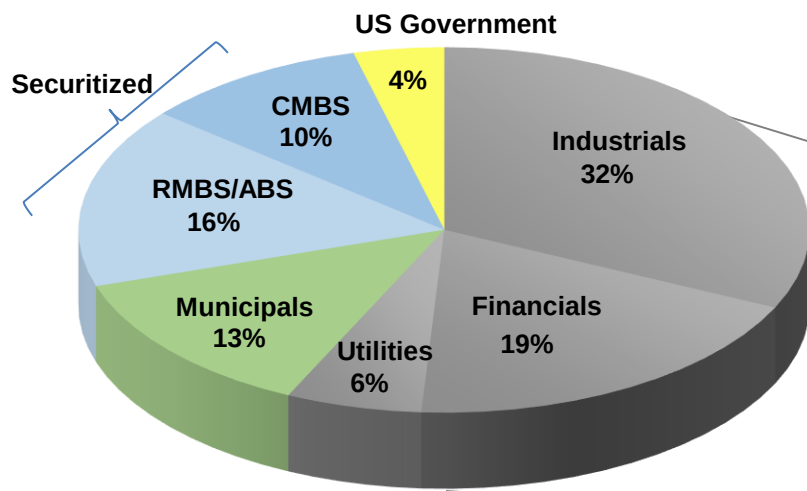


* Net Investment Income from Partnerships, Equities and Other investments is presented net of investment expenses



Fixed Maturity Portfolio - \$6.6 Billion

As of March 31, 2020



Fixed Maturity Characteristics:

- 96% of fixed maturity securities are investment grade
- Weighted average quality: A+
- Duration: 4.2 years
- Commercial mortgage-backed securities (CMBS) are 95% AAA-rated and diversified by property type, metro area and vintage year; lower exposure to retail, relative to broad indices
- As of April 24, the fixed maturity portfolio net unrealized gain increased and book value per share has recovered a substantial portion of the decline since March 31, 2020

Corporate Portfolio: \$3.8 Billion

(\$ in millions)

Industrial Sectors:

	Amortized Cost, net of Allowance	Market Value	Net Unrealized Gain (loss)
Energy	\$ 208.8	\$ 194.0	\$ (14.8)
Retailers	110.1	110.5	0.4
Transportation services	95.1	96.5	1.4
Lodging	24.0	22.8	(1.2)
Restaurants	21.8	21.6	(0.2)
Airlines	8.8	7.3	(1.5)
Other Industrial	1,671.0	1,689.0	18.0
Industrials	2,139.6	2,141.7	\$ 2.1
Financials	1,210.2	1,223.3	13.1
Utilities	393.0	399.3	6.3
Total Corporate	\$ 3,742.8	\$ 3,764.3	\$ 21.5

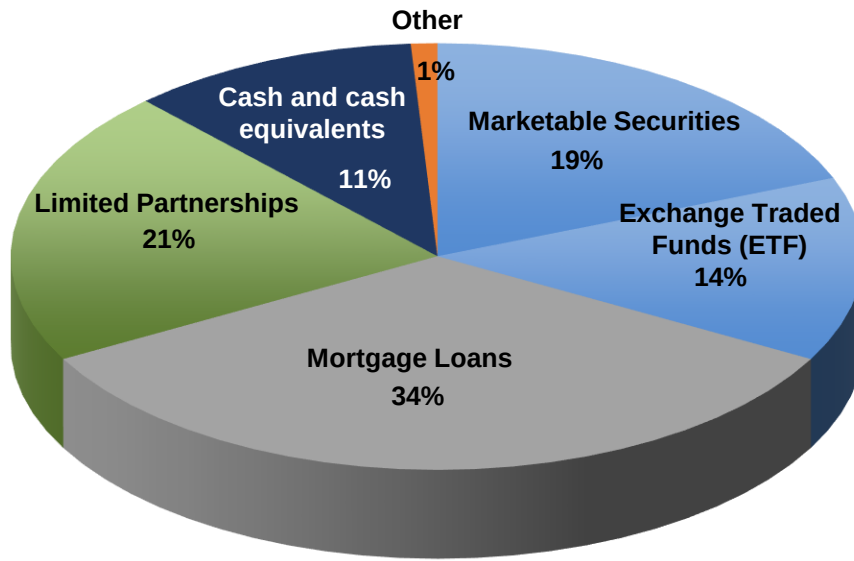
Corporate Portfolio Characteristics:

- Over last several years, reduced exposure to sectors and asset classes (high-yield) that are inherently more volatile; remaining energy portfolio is over 90% investment grade
- Limited exposure to industries more sensitive to economic consequences of COVID-19, including retail, lodging, restaurants and airlines, which collectively represent only 2.4% of fixed maturity portfolio



Non-Fixed Maturity Portfolio - \$1.4 Billion

As of March 31, 2020



Non-Fixed Maturity Portfolio Characteristics:

- Partnership mix is weighted toward credit and mezzanine funds, which are historically less volatile
 - Very limited investment in private equity (12% of partnership portfolio)
 - No partnership investments in energy companies or companies that support the energy sector
 - Our partnerships are not exposed to retail
 - Report on a one quarter lag
- Equity securities are well diversified
 - Primarily public common equity and broad market ETFs; attractive dividend yields
- Mortgage Loans
 - Weighted average loan-to-value (LTV) of 55%
 - Minimal exposure to lodging and retail



2020 Outlook based on information available through April 28th*

Current outlook is associated with much more uncertainty than usual

Results by quarter and by line will likely be uneven

- Affirm the original full year ex-cat combined ratio outlook of 91-92%
- Reduce net investment income guidance by an additional \$15 million to approximately \$255 million, reflecting expected partnership marks in Q2 2020, which are reported on one quarter lag
- Suspend net premiums written guidance at this time, while continuing to monitor policy endorsements, new business and cancellation activity

Metric	Q4 2019 Call	Q1 2020 Call
Net premiums written	Mid-single-digits	Suspend
Expense ratio	10bps improvement	Affirm
Combined ratio, ex-cat	91-92%	Affirm
Catastrophes	4.6%	Affirm
Effective Tax Rate	21%	Affirm
Net Investment Income	Lower than 2019 by \$8 million	In the range of ~\$255 million

*This presentation and the content thereof must be read and interpreted in conjunction with information regarding risk factors and forward-looking information as set forth in this presentation and in the company's most recently filed reports on Form 10-K and Form 10-Q and other documents filed by The Hanover Insurance Group, Inc. with the Securities and Exchange Commission ("SEC") and that are also available at www.hanover.com under "Investors."



About The Hanover

The Hanover Insurance Group, Inc. is the holding company for several property and casualty insurance companies, which together constitute one of the largest insurance businesses in the United States. The company provides exceptional insurance solutions in a dynamic world. The Hanover distributes its products through a select group of independent agents and brokers. Together with its agents, The Hanover offers standard and specialized insurance protection for small and mid-sized businesses, as well as for homes, automobiles, and other personal items. For more information, please visit hanover.com.



Forward-Looking Statements and Additional Risks and Uncertainties

Forward-Looking Statements

Certain statements in this document and comments made by management may be “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, may be forward-looking statements. Words such as, but not limited to, “believes,” “anticipates,” “expects,” “may,” “projects,” “projections,” “plan,” “likely,” “potential,” “targeted,” “forecasts,” “should,” “could,” “continue,” “outlook,” “guidance,” “modeling” and other similar expressions are intended to identify forward-looking statements. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. The company cautions investors that any such forward-looking statements are estimates, beliefs, expectations and/or projections that involve significant judgement, and that historical results, trends and forward-looking statements are not guarantees and are not necessarily indicative of future performance. Actual results could differ materially from those anticipated.

These statements include, but are not limited to, the company’s statements regarding:

- The company’s outlook and its ability to achieve components or the sum of the respective period guidance on its future results of operations including: the combined ratio, excluding or including both prior-year reserve development and/or catastrophe losses; catastrophe losses; net investment income; growth of net premiums written and/or net premiums earned in total or by line of business; expense ratio; operating return on equity; and/or the effective tax rate;
- The impact of the COVID-19 outbreak and subsequent global pandemic (“Pandemic”) and related economic conditions on the company’s operating and financial results, including, but not limited to, the impact on the company’s investment portfolio, declining claims frequency as a result of reduced economic activity, severity from higher cost of repairs due to, among other things, supply chain disruptions, and declines in premium as a result of, among other things, credits or refunds to the company’s customers, lower submissions, renewals and policy endorsements;
- Uses of capital for share repurchases, special or ordinary cash dividends, business investments or growth, or otherwise, and outstanding shares in future periods as a result of various share repurchase mechanisms, capital management framework, especially in the current environment, and overall comfort with capital levels;
- Variability of catastrophe losses due to risk concentrations, changes in weather patterns including global warming, terrorism or other events, as well as the complexity in estimating losses from large catastrophe events due to delayed reporting of the existence, nature or extent of losses or where “demand surge,” regulatory assessments, litigation, coverage and technical complexities or other factors may significantly impact the ultimate amount of such losses;
- Current accident year losses and loss selections (“picks”), excluding catastrophes, and prior accident year loss reserve development patterns, particularly in complex “longer tail” liability lines, as well as the inherent variability in property and non-catastrophe weather losses;
- The confidence or concern that the current level of reserves is adequate and/or sufficient for future claim payments, whether due to losses that have been incurred but not reported, circumstances that delay the reporting of losses, business complexity, adverse judgments or developments with respect to case reserves, the difficulties and uncertainties inherent in projecting future losses from historical data, changes in replacement and medical costs, as well as complexities related to the Pandemic, including legislative, regulatory or judicial actions that expand the intended scope of coverages, or other factors;
- Characterization of some business as being “more profitable” in light of inherent uncertainty of ultimate losses incurred, especially for “longer tail” businesses;
- Efforts to manage expenses, including the company’s long-term expense savings targets, while allocating capital to business investment, which is at management’s discretion;
- Mix improvement, underwriting initiatives, coverage restrictions and pricing segmentation actions, among others, to grow businesses believed to be more profitable or reduce premiums attributable to products believed to be less profitable; balance rate actions and retention; offset long-term and/or short-term loss trends due to increased frequency; increased “social inflation” from a more litigious environment and higher average cost of resolution, increased property replacement costs, and/or social movements;
- The ability to generate growth in targeted segments through new agency appointments; rate increases (as a result of its market position, agency relationships or otherwise), retention improvements or new business; expansion into new geographies; new product introductions; or otherwise; and
- Investment returns and the effect of macro-economic interest rate trends, including the macro-economic impact of the Pandemic and corresponding governmental initiatives taken in response, and geopolitical circumstances on new money yields and overall investment returns.

Additional Risks and Uncertainties

Investors are further cautioned and should consider the risks and uncertainties in the company’s business that may affect such estimates and future performance that are discussed in the company’s most recently filed reports on Form 10-K and Form 10-Q and other documents filed by The Hanover Insurance Group, Inc. with the Securities and Exchange Commission (“SEC”) and that are also available at www.hanover.com under “Investors.” These risks and uncertainties include, but are not limited to:

- The severity, duration and long-term impact related to the Pandemic, including, but not limited to, decline in economic conditions, possible government responses, legislative, regulatory and judicial actions, adverse impacts to the investment portfolio valuation and yield, changes in frequency and severity of claims in both Commercial and Personal Lines, customers’ ability to pay premiums or renew existing insurance policies, impacts to distributors (including agent partners), and the possibility of additional premium adjustments, including credits and returns, for the benefit of insureds;
- The potential for operations to be disrupted or negatively impacted due to (i) the risk of the company’s workforce, including third-party contractors, being unable to work due to illness, quarantine, limitations on travel or other government restrictions in connection with COVID-19 and the Pandemic; (ii) the company’s reliance on the functioning of business continuity plans and technological applications while the majority of employees work remotely for an extended period of time; and (iii) the ongoing threat of cyber attacks and vulnerabilities;



Additional Risks and Uncertainties (continued)

Additional Risks and Uncertainties (continued)

- Changes in regulatory, legislative, economic, market and political conditions, particularly in response to COVID-19 and the Pandemic (such as legislative or regulatory actions that would retroactively require insurers to cover business interruption or other types of claims irrespective of terms, exclusions or other conditions included in the contractual terms of the policies that would otherwise preclude coverage);
- Heightened investment market volatility, fluctuations in interest rates (which have a significant impact on the market value of the investment portfolio and thus book value), U.S. Federal Reserve actions, inflationary pressures, default rates, prolonged global market conditions and other factors that affect investment returns from the investment portfolio;
- Adverse claims experience, including those driven by large or increased frequency of catastrophe events (including terrorism), and severe weather;
- The uncertainty in estimating weather-related losses or the long-term impacts of the Pandemic, and the limitations and assumptions used to model other property and casualty losses (particularly with respect to products with longer tails, such as casualty and bodily injury claims, or involving emerging issues related to losses incurred as the result of new lines of business, such as cyber or financial institutions coverage, or reinsurance contracts and reinsurance recoverables), leading to potential adverse development of loss and loss adjustment expense reserves;
- Litigation and the possibility of adverse judicial decisions, including those which expand policy coverage beyond its intended scope or award “bad faith” or other non-contractual damages, and the impact of “social inflation” affecting judicial awards and settlements;
- The ability to increase or maintain insurance rates in line with anticipated loss costs and/or governmental action, including mandates by state departments of insurance to either raise or lower rates or provide credits or the return premium to insureds;
- Investment impairments, which may be affected by, among other things, the company’s ability and willingness to hold investment assets until they recover in value, as well as credit and interest rate risk and general financial and economic conditions;
- Disruption of the independent agency channel, including the impact of competition and consolidation in the industry and among agents and brokers, and the degree to which agents and brokers remain operational during the Pandemic;
- Competition, particularly from competitors who have resource and capability advantages;
- The global macroeconomic environment, including actions taken in response to the Pandemic, inflation, global trade wars, energy markets disruptions, equity price risk, and interest rate fluctuations, which, among other things, could result in reductions in market values of fixed maturity and other investments;
- Adverse state and federal regulation, legislative and/or regulatory actions (including recent significant revisions to Michigan’s automobile personal injury protection system and related litigation, and various regulations, orders and proposed legislation related to business interruptions and workers’ compensation coverages, premium grace periods and refunds, and rate actions);
- Financial ratings actions, in particular, downgrades to the company’s ratings;
- Operational and technology risks and evolving technological and product innovation, including risks created by remote work environments, and the risk of cyber-security attacks or breaches on the company’s systems or resulting in claim payments (including from products not intended to provide cyber coverage);
- Uncertainties in estimating indemnification liabilities recorded in conjunction with obligations undertaken in connection with the sale of various businesses and discontinued operations; and
- The ability to collect from reinsurers, reinsurance pricing, and the performance of the discontinued voluntary property and casualty pools business (including those in the Other segment or in Discontinued Operations).

Investors should not place undue reliance on forward-looking statements, which speak only as of the date they are made, and should understand the risks and uncertainties inherent in or particular to the company’s business. We do not undertake the responsibility to update or revise such forward-looking statements.



Non-GAAP Financial Measures

Non-GAAP Financial Measures

The discussion in this presentation and the associated conference call of The Hanover's financial performance includes reference to certain financial measures that are not derived from generally accepted accounting principles, or GAAP, such as operating income, operating income before taxes (and interest expense), combined ratios and loss ratios, excluding catastrophes and/or prior-year development and accident year loss ratios, excluding catastrophes. A reconciliation of non-GAAP measures to the closest GAAP measure is included in the end notes to this presentation, the press release dated April 28, 2020 or the financial supplement, which are posted on our website. The reconciliation of current accident year loss ratio and combined ratio excluding catastrophes to the most directly comparable GAAP measure, total loss ratio and combined ratio, is found in the end notes on the final pages of this document. Operating income (operating income per diluted share) is a non-GAAP measure. It is defined as net income (loss) excluding the after-tax impact of net realized and unrealized investment gains and losses, as well as results from discontinued operations, divided by, in the case of per share reported figures, the average number of diluted shares of common stock. For the first quarter of 2020, operating income metrics are calculated using diluted shares outstanding, however, non-operating items, loss from continuing and discontinued operations and net loss metrics are calculated using basic shares outstanding due to antidilution. In referral to one of the company's three segments, operating income is segment income before taxes.

Operating return on equity ("ROE") and adjusted operating ROE are non-GAAP measures. See end note (6) for a detailed explanation of how these measures are calculated. Operating ROE is based on non-GAAP operating income and excludes the portion of shareholder equity attributed to unrealized appreciation (depreciation) on fixed maturity investments, net of tax. Adjusted operating ROE is a measure of operating income as a return on only the portion of shareholders' equity attributable to continuing operations, and therefore, the "un-deployed equity" attributable to Chaucer is also excluded from shareholders' equity and the related net investment income from the reinvestment of the un-deployed equity is excluded from net and operating income. This eliminates the dilutive impact of any excess capital that would have been included in shareholders' equity, which as of year-end 2019 has been fully deployed, and any resulting net investment income included in operating income, for the corresponding periods presented. Beginning in the first quarter of 2020, no adjustments related to "un-deployed equity" attributable to Chaucer or the corresponding net investment income are made since the equity was fully deployed. However, the company will continue to adjust periods prior to 2020 to allow investors meaningful comparisons between periods. The company believes that these measures are helpful in that they provide insight to the capital used by, and results of, the continuing business exclusive of interest, taxes and other non-operating items, and, in this case of "adjusted operating ROE", undeployed equity attributed to Chaucer. These measures should not be construed as substitutes for GAAP ROE, which is based on net income and shareholders' equity of the entire company and without adjustments.



End notes

(1) Operating income (loss) and operating income (loss) per diluted share are non-GAAP measures. See the disclosure on the use of non-GAAP measures throughout this presentation under the heading “Non-GAAP Financial Measures.” The following table provides the reconciliation of operating income (loss) and operating income (loss) per diluted share to the most directly comparable GAAP measures, income (loss) from continuing operations and income (loss) from continuing operations per diluted share, respectively, which are then reconciled to net income (loss) and net income (loss) per diluted share, respectively:

	Three months ended			
	March 31, 2019		March 31, 2020	
(In millions, except per share data)	\$ Amount	Per Share Diluted	\$ Amount	Per Share*
OPERATING INCOME (LOSS)				
Commercial Lines	\$80.2		\$54.6	
Personal Lines	26.8		64.9	
Other	2.8		(2.4)	
Total	109.8		117.1	
Interest expense	(9.4)		(9.4)	
Operating income before income taxes	100.4	\$2.44	107.7	\$2.77
Income tax expense on operating income	(19.7)	(0.48)	(20.9)	(0.54)
Operating income after income taxes	80.7	1.96	86.8	2.23
Per share adjustment	-	-	-	0.04
Non-operating items:				
Net realized gains (losses) from sales and other	(0.4)	(0.01)	3.1	0.08
Net change in fair value of equity securities	48.6	1.18	(136.2)	(3.56)
Impairment losses on investments	-	-	(28.5)	(0.74)
Income tax benefit (expense) on non-operating items	(6.3)	(0.15)	36.1	0.94
Income (loss) from continuing operations, net of taxes	122.6	2.98	(38.7)	(1.01)
Discontinued Operations (net of taxes):				
Sale of Chaucer business	0.9	0.02	-	-
Loss from Chaucer business	(0.3)	(0.01)	-	-
Loss from discontinued life businesses	(0.8)	(0.02)	(1.3)	(0.03)
Net income (loss)	\$122.4	\$2.97	(\$40.0)	(\$1.04)
Dilutive weighted average shares outstanding		41.2		38.9
Basic weighted average shares outstanding		40.6		38.3

* Operating income metrics are calculated using diluted shares outstanding; non-operating items, loss from continuing and discontinued operations and net loss metrics are calculated using basic shares outstanding due to antidilution.



End notes continued

(2) Combined ratio, excluding catastrophes, and current accident year combined ratio, excluding catastrophes, are non-GAAP measures. The combined ratio, excluding catastrophes is equal to the combined ratio, excluding catastrophe losses. The current accident year combined ratio, excluding catastrophes, is equal to the combined ratio, excluding catastrophe losses and prior-year reserve development. These measures are used throughout this document. The combined ratio (which includes catastrophe losses and prior-year reserve development) is the most directly comparable GAAP measure. The following is a reconciliation of the GAAP combined ratio to the combined ratio, excluding catastrophes losses, and the current accident year combined ratio, excluding catastrophe losses:

Three months ended March 31, 2020			
	Commercial Lines	Personal Lines	Total
Total combined ratio	98.2 %	90.0 %	95.2 %
Less: Catastrophe loss ratio	3.5 %	3.0 %	3.3 %
Combined ratio, excluding catastrophe losses	94.7 %	87.0 %	91.9 %
Less: Prior-year reserve development ratio	(0.5)%	(0.3)%	(0.2)%
Current accident year combined ratio, excluding catastrophe losses	95.2 %	87.3 %	92.1 %
March 31, 2019			
Total combined ratio	94.2 %	98.2 %	95.8 %
Less: Catastrophe loss ratio	1.6 %	6.6 %	3.6 %
Combined ratio, excluding catastrophe losses	92.6 %	91.6 %	92.2 %
Less: Prior-year reserve development ratio	(1.1)%	1.7 %	-
Current accident year combined ratio, excluding catastrophe losses	93.7 %	89.9 %	92.2 %



End notes continued

(3) Current accident year loss and LAE ratio, excluding catastrophe losses, is a non-GAAP measure, which is equal to the loss and LAE ratio ("loss ratio"), excluding prior-year reserve development and catastrophe losses. The loss ratio (which includes losses, LAE, catastrophe losses and prior-year loss reserve development) is the most directly comparable GAAP measure. The following is a reconciliation of the GAAP loss ratio to the current accident year loss and LAE ratio, excluding catastrophe losses:

Three months ended										
March 31, 2020										
	Commercial Multiple Peril	Commercial Auto	Workers' Comp	Commercial Other	Commercial Lines	Personal Auto	Home	Other Personal	Personal Lines	Total
Total loss and LAE Ratio	74.0 %	72.0 %	54.7 %	56.6 %	64.2 %	68.6 %	54.2 %	27.7 %	62.5 %	63.8 %
Less:										
Prior-year reserve development ratio	1.8 %	5.3 %	(8.7)%	(1.9)%	(0.5)%	1.0 %	(1.9)%	(11.5)%	(0.3)%	(0.2)%
Catastrophe ratio	6.4 %	0.2 %	-	3.2 %	3.5 %	0.6 %	7.7 %	1.5 %	3.0 %	3.3 %
Current accident year loss ratio, excluding catastrophe losses	65.8 %	66.5 %	63.4 %	55.3 %	61.2 %	67.0 %	48.4 %	37.7 %	59.8 %	60.7 %
March 31, 2019										
Total loss and LAE Ratio	58.4 %	72.6 %	54.0 %	57.4 %	59.3 %	73.1 %	67.1 %	54.6 %	70.6 %	63.9 %
Less:										
Prior-year reserve development ratio	(1.8)%	2.7 %	(5.7)%	(0.5)%	(1.1)%	2.2 %	-	11.1 %	1.7 %	-
Catastrophe ratio	4.3 %	0.1 %	-	0.3 %	1.6 %	0.3 %	18.4 %	1.9 %	6.6 %	3.6 %
Current accident year loss ratio, excluding catastrophe losses	55.9 %	69.8 %	59.7 %	57.6 %	58.8 %	70.6 %	48.7 %	41.6 %	62.3 %	60.3 %



End notes continued

(4) Core Commercial business provides commercial property and casualty coverages to small and mid-sized businesses in the U.S., generally with annual premiums per policy up to \$250,000, primarily through the commercial multiple peril, commercial auto and workers' compensation lines of business, as reported on the current quarter financial supplement. Price increases in Commercial Lines and Core Commercial Lines represent the average change in premium on renewed policies caused by the estimated net effect of base rate changes, discretionary pricing, inflation or changes in policy level exposure or insured risks. Rate increases in Commercial Lines and Core Commercial Lines represent the average change in premium on renewed policies caused by the base rate changes, discretionary pricing, and inflation, excluding the impact of changes in policy level exposure or insured risks

(\$ in millions)	Three months ended		
	March 31, 2020		
	Core Commercial	Other Commercial	Total Commercial
Net premiums written	\$421.7	\$285.9	\$707.6
Net premiums earned	\$395.4	\$280.5	\$675.9
	December 30, 2019		
	Core Commercial	Other Commercial	Total Commercial
Net premiums written	\$369.8	\$268.9	\$638.7
Net premiums earned	\$396.6	\$282.9	\$679.5
	September 30, 2019		
	Core Commercial	Other Commercial	Total Commercial
Net premiums written	\$440.3	\$306.1	\$746.4
Net premiums earned	\$385.4	\$278.1	\$663.5
	June 30, 2019		
	Core Commercial	Other Commercial	Total Commercial
Net premiums written	\$367.5	\$277.2	\$644.7
Net premiums earned	\$385.6	\$273.2	\$658.8
	March 31, 2019		
	Core Commercial	Other Commercial	Total Commercial
Net premiums written	\$402.5	\$274.9	\$677.4
Net premiums earned	\$382.4	\$270.0	\$652.4

(5) Price increases in Personal Lines is the estimated cumulative premium effect of approved rate actions applied to policies available for renewal, regardless of whether or not policies are actually renewed. Accordingly, pricing changes do not represent actual increases or decreases realized by the company.



End notes continued

(6) Operating Return on Average Equity and Adjusted Operating Return on Average Equity (“Operating ROE” and “Adjusted Operating ROE”) are non-GAAP measures. Operating ROE is calculated by dividing annualized operating income after tax for the applicable period (see under the heading in this presentation “Non-GAAP Financial Measures” and end note (1)), by average shareholders’ equity, excluding unrealized appreciation (depreciation) on fixed maturity investments, net of tax, for the stated period (end note (8)). For Adjusted Operating ROE, shareholders’ equity is adjusted for the then un-deployed equity attributable to Chaucer and for net unrealized appreciation (depreciation) on fixed maturity investments, net of tax (end note (8)). Please see end note (8) for a detailed reconciliation of adjusted shareholders’ equity with and without net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and including the payment of the \$250 million ASR agreement for the first quarter 2019 calculation. Additionally, for the calculation of Adjusted Operating ROE, Operating Income, net of tax, is adjusted for the net investment income related to undeployed equity attributable to Chaucer, net of tax. Operating ROE and Adjusted Operating ROE should not be construed as substitutes for GAAP ROE. See calculations in table below, including the calculation of Net Income (loss) ROE using net income (loss), annualized, and average shareholders’ equity without adjustments:

	Three months ended	
	March 31 2019	March 31 2020
<i>Net Income (Loss) ROE (non-GAAP)</i>		
Net income (loss) (GAAP)	\$122.4	(\$40.0)
Annualized net income (loss)* (non-GAAP)	489.6	(160.0)
Average shareholders' equity (GAAP) (end note (8))	2,940.9	2,826.4
Return on equity (non-GAAP)	16.6 %	(5.7)%
<i>Operating Income ROE (non-GAAP)</i>		
Annualized operating income, net of tax* (end note (1))	\$322.8	\$347.2
Average shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and including the ASR payment (end note (8))	2,784.1	2,652.0
Operating return on equity	11.6 %	13.1 %
<i>Adjusted Operating Income ROE (non-GAAP)</i>		
Annualized operating income, net of tax* (end note (1))	\$322.8	
Less: Annualized net investment income related to un-deployed equity attributable to Chaucer, net of tax**	(11.7)	
Annualized operating income, excluding the net investment income related to the un-deployed equity attributable to Chaucer, net of tax	\$311.1	
Average adjusted shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity (end note (8))	2,377.5	
Adjusted operating return on equity	13.1 %	

*For three months ended March 31, 2019 and 2020, respectively, annualized net and operating income (loss) is calculated by multiplying three months ended net income (loss) and operating income, respectively, by four.

**Annualized net investment income related to the un-deployed equity attributable to Chaucer, net of tax, for Q1 2019 is calculated by multiplying the Q1 2019 un-deployed equity attributable to Chaucer (end note (8)) by the Q1 2019 total pre-tax yield, net of tax.



End notes continued

(7) Throughout this presentation, for purposes of the expense ratio calculation, expenses are reduced by installment and other fees.

(8) Total shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, is a non-GAAP measure. Total shareholders' equity is the most directly comparable GAAP measure, and is reconciled in the table below. For the calculation of Operating ROE, the average of total shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, for the beginning, ending, and interim (if applicable) quarters are used. For the calculation of Adjusted Operating ROE, the average shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and the then un-deployed equity attributable to Chaucer, for the beginning, ending, and interim (if applicable) quarters are used. For the calculation of Operating ROE and Adjusted Operating ROE, the balance at December 31, 2018 was adjusted by the \$250 million paid for the ASR on January 2, 2019 to eliminate the dilutive impact the ASR would have had on unadjusted and adjusted Operating ROE.

(\$ in millions)	December 31, 2018	March 31, 2019	December 31, 2019	March 31, 2020
Total shareholders' equity (GAAP)	\$2,954.7	\$2,927.0	\$2,916.2	\$2,736.6
Less: net unrealized appreciation (depreciation) on fixed maturity investments, net of tax	(27.2)	90.7	216.0	132.8
Total shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax	2,981.9	2,836.3	2,700.2	2,603.8
Less: Payment made on January 2, 2019 for the ASR agreement entered into on December 30, 2018	250.0	-	-	-
Total shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and including the ASR payment	2,731.9	2,836.3	2,700.2	2,603.8
Less: Pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity	406.6	406.6	N/A	N/A
Adjusted shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity	<u>\$2,325.3</u>	<u>\$2,429.7</u>	<u>\$2,700.2</u>	<u>\$2,603.8</u>
Quarter Averages				
Average shareholders' equity (GAAP)		\$2,940.9		\$2,826.4
Average shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and including the ASR payment		\$2,784.1		\$2,652.0
Average adjusted shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity; and including the ASR payment		\$2,377.5		N/A